

**Dr. Duke's Phytochemical and Ethnobotanical Databases**

**List of Plants for BETA-AMYRIN**

Plant	Part	Low PPM	High PPM	StdDev	Reference
Chimaphila umbellata	Plant	2100.0	2125.0	1.0	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Bidens pilosa	Plant		307.5	-1.0	Jim Duke's personal files.
Chrysanthemum cinerariifolium	Flower				--
Vitis vinifera	Leaf				--
Hemidesmus indicus	Root				--
Glechoma hederacea	Plant				--
Triticum aestivum	Seed				--
Mirabilis jalapa	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
Myrica cerifera	Stem				--
Myrica cerifera	Leaf				--
Terminalia arjuna	Leaf				Chauhan, S. M. S., Parkash, S., Kaushik, R. 1997. Isolation of 3-beta-hydroxyolean-12-ene and Related Triterpenoids from the Leaves of Terminalia arjuna. Indian J. Chem. 36B 3: 297-298.
Myrica cerifera	Fruit				--
Spartium junceum	Flower				--
Gossypium sp	Plant				--
Sambucus nigra	Flower				--
Psidium guajava	Fruit				--
Taraxacum officinale	Flower				--
Teucrium polium	Plant				Rizk, A.F.M., The Phytochemistry of the Flora of Qatar, Scientific and Applied Research Centre, University of Qatar, Kingprint, Richmond, UK, 1986.
Albizia lebbeck	Flower				Wealth of India.
Panax quinquefolius	Seed Oil				--
Ligustrum japonicum	Flower				--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Pimpinella anisum	Seed				Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.
Glycyrrhiza glabra	Tissue Culture				--
Mitchella repens	Plant				--
Gentiana lutea	Root				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
Pimpinella anisum	Plant				--
Sarcostemma acidum	Plant				--
Sarracenia purpurea	Shoot				--
Rosmarinus officinalis	Plant				--
Sarracenia purpurea	Root				--
Rosmarinus officinalis	Shoot		13.0		--
Brassica oleracea var. botrytis l.	Bud				--
Cichorium intybus	Seed				--
Trilisa odoratissima	Leaf				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
Calotropis sp.	Bark				--
Centaurea calcitrapa	Plant				--
Sesamum indicum	Seed Oil				--
Cocos nucifera	Seed Oil				Jim Duke's personal files.
Euphorbia hirta	Plant				--
Teucrium scordium	Plant				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Juniperus communis	Stem				--
Acacia senegal	Bark				Chemical Constituents of Oriental Herbs (3 diff. books)
Prunella vulgaris	Plant				--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Plantago ovata	Seed				--
Eucalyptus globulus	Wood		9.0		--
Viburnum opulus	Bark				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Boswellia serrata	Resin, Exudate, Sap				--
Phragmites australis	Shoot				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Arctium lappa	Plant				Jim Duke's personal files.
Nigella sativa	Seed Oil				--
Verbascum thapsus	Leaf				--
Verbascum thapsus	Stem				--
Centaurium erythraea	Plant				--
Verbascum thapsus	Seed				--
Polygala tenuifolia	Root				--
Verbascum thapsus	Root				--
Lycopersicon esculentum	Fruit				--
Viburnum opulus	Root Bark				--
Oenothera biennis	Seed	47.0	100.0		--
Tussilago farfara	Leaf				--
Viburnum prunifolium	Root Bark				--
Momordica charantia	Seed Oil				Jim Duke's personal files.
Kalanchoe pinnata	Leaf				--
Arctostaphylos uva-ursi	Leaf				--
Oenothera biennis	Fruit				--
Vitis vinifera	Stem				--
Medicago sativa	Plant				--

Plant	Part	Low PPM	High PPM	StdDev	Reference
<i>Ulex europaeus</i>	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
<i>Brassica oleracea</i> var. <i>botrytis</i> l.	Flower				--
<i>Medicago sativa</i>	Fruit		15.0		--
<i>Medicago sativa</i>	Seed Essent. Oil				--
<i>Arctium lappa</i>	Leaf				--
<i>Cucumis sativus</i>	Fruit				--
<i>Viburnum prunifolium</i>	Bark				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
<i>Lactuca scariola</i>	Plant				--
<i>Euphorbia pulcherrima</i>	Plant				--
<i>Brassica oleracea</i> var. <i>italica</i>	Bud				Jim Duke's personal files.
<i>Ilex paraguariensis</i>	Leaf				--
<i>Coccinia grandis</i>	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
<i>Asclepias syriaca</i>	Sprout Seedling				--
<i>Chrysanthemum x morifolium</i>	Flower				Wealth of India.
<i>Daucus carota</i>	Root				--
<i>Helianthus annuus</i>	Seed				--
<i>Eupatorium odoratum</i>	Leaf				Tramil
<i>Rubus fruticosus</i>	Leaf				--
<i>Pisum sativum</i>	Seed				--
<i>Rubus fruticosus</i>	Plant				--
<i>Lactuca virosa</i>	Plant				--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Vaccinium myrtillus	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Thevetia peruviana	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
Plumeria acutifolia	Latex Exudate				--
Rhododendron ferrugineum	Leaf				--
Erythroxylum coca	Leaf				--
Fagopyrum esculentum	Seed				--
Hypericum perforatum	Shoot				--
Glycine max	Sprout Seedling				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Swertia chirata	Plant				--
Jatropha curcas	Bark				--
Morus alba	Root Bark				--
Artemisia annua	Plant				Wright, C.W. (Ed) 2002. Medicinal & Aromatic Plants-Industrial Profiles. Artemisia. 344pp. Maffei, M. (Ed) 2002. Vetiveria. The Genus Vetiveria. Taylor & Francis. NY, NY. 191pp. Southwell, I., Lowe, R. (Eds) 1999. Tea Tree. The Genus Melaleuca. Harwood Acad. Pub. Amsterdam, Netherlands.
Acacia leucophloea	Plant				--
Aesculus hippocastanum	Seed Oil				Jim Duke's personal files.
Panax ginseng	Seed Oil				--
Ricinus communis	Leaf				Rizk, A.F.M. and Al-Nowaihi, A.S., The Phytochemistry of the Horticultural Plants of Qatar, Scientific and Applied Research Centre, University of Qatar.
Ficus carica	Leaf				--
Calendula officinalis	Flower				--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Glycyrrhiza glabra	Root				--
Viscum album	Resin, Exudate, Sap				--
Olea europaea	Leaf				Chemical Constituents of Oriental Herbs (3 diff. books)
Glycine max	Seed				--
Duchesnea indica	Plant				--
Salvia officinalis	Leaf		1000.0		--
Salvia officinalis	Plant				--
Zea mays	Shoot				--
Gaultheria procumbens	Leaf				--
Gaultheria procumbens	Shoot				--
Vitellaria paradoxa	Plant				--
Cucumis melo	Seed				Chemical Constituents of Oriental Herbs (3 diff. books)
Teucrium chamaedrys	Plant				Abstract (See species file)
Vernonia cinerea	Seed				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Tilia sp.	Leaf				--
Camellia sinensis	Seed Oil		76.0		--
Iris x germanica	Rhizome				--
Phoenix dactylifera	Pollen Or Spore				Abstract (See species file)
Capsicum annuum	Seed				--
Pterocarpus santalinus	Plant				--
Oenothera biennis	Inflorescence				--
Acacia nilotica	Root				--
Taraxacum officinale	Root				--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Vitellaria paradoxa	Seed Oil				Itoh, O., Uetsuki, T., Tamura, T., Matsumoto, A. 1980. Characterization of Triterpene Alcohols of Seed Oils From Some Species of Theaceae, Phytolaccaceae and Sapotaceae. Lipids 15 6: 407-411.
Aesculus hippocastanum	Bark				--
Camellia japonica	Leaf				Wealth of India.
Camellia japonica	Seed				Wealth of India.